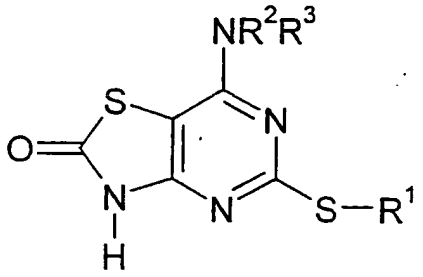
CLAIMS

1. A compound of formula (I) or a pharmaceutically acceptable salt or solvate thereof:



(I)

in which

R^1 represents a C_3-C_7 carbocyclic, C_1-C_8 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl group, each of the groups being optionally substituted by one or more substituent groups independently selected from halogen atoms, $-OR^4$, $-NR^5R^6$, $-CONR^5R^6$, $-COOR^7$, $-NR^8COR^9$, $-SR^{10}$, $-SO_2R^{10}$, $-SO_2NR^5R^6$, $-NR^8SO_2R^9$ or an aryl or heteroaryl group, both of which may be optionally substituted by one or more substituents independently selected from halogen atoms, cyano, nitro, $-OR^4$, $-NR^5R^6$, $-CONR^5R^6$, $-COOR^7$, $-NR^8COR^9$, $-SR^{10}$, $-SO_2R^{10}$, $-SO_2NR^5R^6$, $-NR^8SO_2R^9$, C_1-C_6 alkyl or trifluoromethyl groups;

R^2 and R^3 each independently represent a hydrogen atom, or a C_3-C_7 carbocyclic, C_1-C_8 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl group, the latter four groups may be optionally substituted by one or more substituent groups independently selected from:

(a) halogen atoms, $-OR^4$, $-NR^5R^6$ $-CONR^5R^6$, $-COOR^7$, $-NR^8COR^9$, $-SR^{10}$, $-SO_2R^{10}$, $-SO_2NR^5R^6$, $-NR^8SO_2R^9$

(b) a 3-8 membered ring optionally containing one or more atoms selected from O, S, NR^8 and itself optionally substituted by C_1-C_3-alkyl or halogen,

(c) an aryl group or heteroaryl group each of which may be optionally substituted by one or more substituents independently selected from halogen atoms, cyano, nitro, $-OR^4$, $-NR^5R^6$, $-CONR^5R^6$, $-NR^8COR^9$, $-SO_2NR^5R^6$, $-NR^8SO_2R^9$, C_1-C_6 alkyl and trifluoromethyl groups;

R^4 represents hydrogen, C_1-C_6 alkyl or a phenyl group the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl, $-OR^{11}$ and $-NR^{12}R^{13}$

R^5 and R^6 independently represent a hydrogen atom or a C_1-C_6 alkyl or phenyl group the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl, $-OR^{14}$ and $-NR^{15}R^{16}$, $-CONR^{15}R^{16}$, $-NR^{15}COR^{16}$, $-SONR^{15}R^{16}$, $NR^{15}SO_2R^{16}$

or

R^5 and R^6 together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring system optionally containing a further heteroatom selected from oxygen and nitrogen atoms, which ring system may be optionally substituted by one or more substituent groups independently selected from phenyl, $-OR^{14}$, $-COOR^{14}$, $-NR^{15}R^{16}$, $-CONR^{15}R^{16}$, $-NR^{15}COR^{16}$, $-SONR^{15}R^{16}$, $NR^{15}SO_2R^{16}$ or C_1-C_6 alkyl, itself optionally substituted by one or more substituents independently selected from halogen atoms and $-NR^{15}R^{16}$ and $-OR^{17}$ groups;

R^{10} represents a hydrogen atom or a C_1-C_6-alkyl or a phenyl group, the latter two of which may be optionally substituted by one or more substituent groups independently selected from halogen atoms, phenyl, $-OR^{17}$ and $-NR^{15}R^{16}$; and

each of R^7, R^8, R^9, R^{11}, R^{12}, R^{13}, R^{14} R^{15}, R^{16}, R^{17} independently represents a hydrogen atom or a C_1-C_6, alkyl, or a phenyl group.

2. A compound according to claim 1, wherein R^1 represents an optionally substituted benzyl group.

3. A compound according to claim 1 or claim 2, wherein one of R^2 and R^3 is hydrogen and the other is C_1-C_8 alkyl substituted by hydroxy and one or more methyl or ethyl groups.

4. A compound according to claim 1 selected from:

7-[(2-Hydroxy-1,1-dimethylethyl)amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

(*R*)-7-[[1-(Hydroxymethyl)propyl]amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

(*R*)-7-[(2-Hydroxy-1-methylethyl)amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-Difluorophenyl)methyl]thio]-7-[(2-hydroxy-1,1-dimethylethyl)amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-Difluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one,

5-[[(2,3-difluorophenyl)methyl]thio]-7-[[2-(hydroxyethoxy)ethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-difluorophenyl)methyl]thio]-7-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[(2-aminoethyl)amino]-5-[[(2,3-difluorophenyl)methyl]thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-difluorophenyl)methyl]thio]-7-[(2-hydroxyethyl)amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

N-[2-[[5-[[(2,3-difluorophenyl)methyl]thio]-2,3-dihydro-2-oxothiazolo[4,5-*d*]pyrimidin-7-yl]amino]ethyl]methanesulfonamide,

(+/-)-5-[[(2,3-difluorophenyl)methyl]thio]-7-[[2-(2-hydroxyethoxy)-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-amino-1-methylethyl]amino]-5-[[(2,3-difluorophenyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-difluorophenyl)methyl]thio]-7-[[(1*R*)-2-[(2-hydroxyethyl)amino]-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-difluorophenyl)methyl]thio]-7-[[(1*R*)-2-(dimethylamino)-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[[4-(2-aminoethoxy)-3-chlorophenyl]methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[3-Chloro-4-methoxyphenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one,

5-[[3-Chloro-2-fluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one,

5-[[(2,3-Difluorophenyl)methyl]thio]-7-[[(3*R*,4*R*)-4-hydroxypyrrolidin-3-yl]amino]-thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-Difluorophenyl)methyl]thio]-7-[(3*R*)-pyrrolidin-3-ylamino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-Hydroxy-1-methylethyl]amino]-5-[[(2-methyl-4-thiazolyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[2-Hydroxy-1-(hydroxymethyl)ethyl]amino]-5-[[(2-methyl-4-thiazolyl)methyl] thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[(2-Hydroxy-1,1-dimethylethyl)amino]-5-[[(2-methyl-4-thiazolyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[(2-Hydroxy-1,1-dimethylethyl)amino]-5-[[(2-methylphenyl)methyl)thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[(2-Furanylmethyl)thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-Amino-1-methylethyl]amino]-5-[[(3-chloro-2-fluorophenyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one

(2S)-2-[[5-[[(2,3-Difluorophenyl)methyl]thio]-2,3-dihydro-2-oxothiazolo[4,5-*d*]pyrimidin-7-yl]amino]-3-hydroxy-propanamide,

7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]-5-[(2-thienylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]-5[[[3-methyl-4-(methylsulfonyl)phenyl]methyl]thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[[3-chloro-4-(trifluoromethoxy)phenyl]methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[[2-fluoro-3-(trifluoromethyl)phenyl]methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-difluorophenyl)methyl]thio]-7-[2-[(dimethylamino)ethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2-fluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]-5-[[(2-methoxyphenyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]-5-[(2-phenoxyethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]-5-[[(3-methylphenyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2-fluoro-3-methylphenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(3-chlorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(3-bromophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[[4-(difluoromethoxy)phenyl]methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

(+/-)-5-[[(2,3-difluorophenyl)methyl]thio]-7-[[2-hydroxy-1-(methoxymethyl)ethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2-bromophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

5-[[(2,3-Difluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one,

5-[[3-Chloro-2-fluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one,

(+/-)-5-[[(2,3-difluorophenyl)methyl]thio]-7-[[2-hydroxy-1-(methoxymethyl)ethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

7-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,

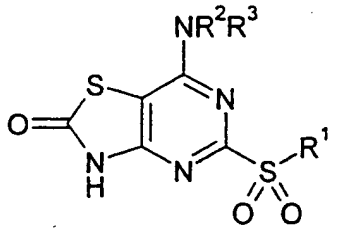
7-[[(1*R*)-2-Hydroxy-1-methylethyl]amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,
5-[(5-chloro-1,2,3-thiadiazol-4-yl)thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]-thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,
and their pharmaceutically acceptable salts and solvates.

5. A compound according to claim 1 selected from:
5-[[(2,3-Difluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one sodium salt,
5-[[3-Chloro-2-fluorophenyl)methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino] thiazolo[4,5-*d*]pyrimidin-2(*3H*)-one sodium salt,
(+/-)-5-[[(2,3-difluorophenyl)methyl]thio]-7-[[2-hydroxy-1-(methoxymethyl)ethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one sodium salt,
7-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one sodium salt, or
7-[[(1*R*)-2-Hydroxy-1-methylethyl]amino]-5-[(phenylmethyl)thio]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one sodium salt.

6. A compound according to claim 1 selected from:
7-[[(1*R*)-2-amino-1-methylethyl]amino]-5-[[(2,3-difluorophenyl)methyl]thio] thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one trifluoroacetate,
5-[[(2,3-difluorophenyl)methyl]thio]-7-[[(1*R*)-2-[(2-hydroxyethyl)amino]-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one trifluoroacetate,
5-[[(2,3-difluorophenyl)methyl]thio]-7-[[(1*R*)-2-(dimethylamino)-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one,
5-[[[4-(2-aminoethoxy)-3-chlorophenyl]methyl]thio]-7-[[(1*R*)-2-hydroxy-1-methylethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one trifluoroacetate,
5-[[(2,3-difluorophenyl)methyl]thio]-7-[2-[(dimethylamino)ethyl]amino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one monohydrochloride, or
5-[[(2,3-Difluorophenyl)methyl]thio]-7-[(3*R*)-pyrrolidin-3-ylamino]thiazolo[4,5-*d*]pyrimidin-2(3*H*)-one dihydrochloride.

7. A process for the preparation of a compound of formula (I) as defined in claim 1 which comprises:

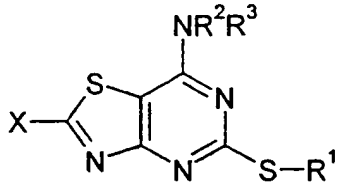
(a) treating a compound of formula (IIA):



(IIA)

where R^1, R^2 and R^3 are as defined in formula (I) with a thiol R^1SH in the presence of a suitable base, or

(b) treatment of a compound of formula (IIB):



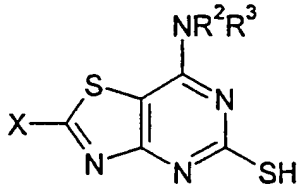
(IIB)

where R^1, R^2 and R^3 are as defined in formula (I) and X is a leaving group with a metal alkoxide, followed by treatment with an acid or base,

and optionally after (a) or (b) forming a pharmaceutically acceptable salt.

8. A compound of formula (IIA) or (IIB) as defined in claim 7.

9. A compound of formula (IIIA):



(IIIA)

where R^2 and R^3 are as defined in formula (I) and X is NH_2

10. A pharmaceutical composition comprising a compound of formula (I), or a pharmaceutically acceptable salt or solvate thereof, as claimed in any one of claims 1 to 6 in association with a pharmaceutically acceptable adjuvant, diluent or carrier.

11. A process for the preparation of a pharmaceutical composition as claimed in claim 10 which comprises mixing a compound of formula (I), or a pharmaceutically acceptable salt or solvate thereof, as claimed in any one of claims 1 to 6 with a pharmaceutically acceptable adjuvant, diluent or carrier.

12. A compound of formula (I), or a pharmaceutically-acceptable salt or solvate thereof, as claimed in any one of claims 1 to 6 for use in therapy.

13. Use of a compound of formula (I), or a pharmaceutically acceptable salt or solvate thereof, as claimed in any one of claims 1 to 6 in the manufacture of a medicament for use in therapy.

14. A method of treating a chemokine mediated disease wherein the chemokine binds to one or more chemokine receptors, which comprises administering to a patient a therapeutically effective amount of a compound of formula (I), or a pharmaceutically acceptable salt or solvate thereof, as claimed in any one of claims 1 to 6.

15. A method according to claim 14 in which the chemokine receptor belongs to the CXC chemokine receptor subfamily.

16. A method according to claim 14 or 15 in which the chemokine receptor is the CXCR2 receptor.

17. A method of treating an inflammatory disease in a patient suffering from, or at risk of, said disease, which comprises administering to the patient a therapeutically effective amount of a compound of formula (I), or a pharmaceutically acceptable salt or solvate thereof, as claimed in any one of claims 1 to 6.

18. A method according to claim 17, wherein the disease is psoriasis, a disease in which angiogenesis is associated with raised CXCR2 chemokine levels, or COPD.

19. A method according to claim 15, wherein the disease is psoriasis.